Remarks

The specification has been amended by replacing the originally filed specification with a substitute specification. No new matter has been added. A clean version and a marked-up version of the substitute specification are attached. The amendment corrects informalities noted in the originally filed application.

The claims have also been rewritten to correct informalities.

Respectfully submitted,

Date: 02/26/03

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APPARATUS FOR HOLDING AND MAKING CONTACT WITH A RADIO TELEPHONE

Background of the Invention

[0001] The invention relates to an apparatus for securing and connecting a cellular or radio mobile telephone.

[0002] Such apparatuses are used in order for a telephone to be retained securely and to be connected to components installed in the vehicle, for examples hands-free talking facilities, displays and vehicle aerials.

[0003] Such an accommodating apparatus is known, for example, from German patent document DE 197 55 621 A1. In this retaining apparatus, a mobile telephone is plugged on plug contacts which, on a plate, are articulated on a slide via a hinge. In order to accommodate the mobile telephone in a compartment, the mobile telephone is pivoted onto the slide, clamped in this position by a wall element and then moved into the compartment in the longitudinal direction of the slide. For removal of the mobile telephone, the plate is pivoted with the mobile telephone and the mobile telephone is removed from the plug contacts.

[0004] One disadvantage with the prior art is that when the mobile telephone is plugged on and/or removed, the plug contacts of the retaining apparatus can only exert a limited counterpressure since forces can only be dissipated to the compartment via the plate, hinge and slide. Furthermore, it is not possible for mobile telephones of different sizes to be retained securely by the retaining apparatus, since the retaining apparatus, which retains the mobile telephone in a force-fitting manner, is coordinated with a predetermined size of mobile telephone.

Brief Summary of the Invention

[0005] An object of the invention is to provide an apparatus which allows the insertion of telephones of a wide range of different dimensions, does not yield as the telephone is placed in position and removed, and, for the purposes of placing in position and removal, moves the telephone into an ergonomically optimal position for the user.

[0006] This and other objects are achieved with the present invention

[0007] The apparatus according to the invention comprises a holder which can be adapted to the longitudinal dimension of the housing of the telephone. This adaptation takes place by a longitudinal displacement of the mating contact unit to which the telephone is connected. Alternatively, or in addition, length adaptation of the apparatus is provided by a longitudinal slide mounted on the holder independent of the mating contact unit. The adaptation options make it possible to accommodate telephones of different length dimensions without the holder having to be modified with the exchange of components or by additional components. The holder can be used by any user who has a telephone with a particular contact unit. It is unimportant whether the various telephones have the same dimensions, in particular longitudinal dimensions.

[0008] The insertion of telephones with different housing widths and/or housing thicknesses is ensured in that the mating contact unit, in the region of the contact means, has elevations only in a region which is located outside the conventional telephone dimensions. This forms a holder with an accommodating table or accommodating region which is fully independent of the housing dimensions. All that is required is for the telephone to have an appropriate contact unit. The use of a thick storage battery for the telephone can also be accommodated.

[0009] An ergonomic accommodating position/discharge position is achieved by pivoting the mating contact unit 45° to 135° in relation to the main plane of the holder. It is thus possible for the telephone to be coupled to the holder by a straightforward positioning movement in which the user, with the hand position remaining the same, merely has to lower his/her forearm.

[0010] Moving the telephone from the accommodating position/discharge position into an operating position also takes place with a flowing hand movement. In this case, the telephone is tilted in the direction of the holder and moved into the holder by a tilting/sliding movement. The rearward sliding movement which is necessary at the end, in which the telephone is moved beneath a restraining element by way of a head end, does not have to be executed by the user. This movement is executed by a spring which is prestressed by the rotary and sliding movement.

[0011] The force applied to the mating contact unit and/or to the contact mechanism when the telephone is plugged on is introduced optimally into the holder since the contact mechanism, which is configured, in particular, as connectors, is aligned perpendicularly to the axis of rotation of the mating contact unit.

[0012] Pressure on the contact mechanism thus does not result in any torque about the axis of rotation, and the compressive force is absorbed by the holder without any yielding movement.

[0013] With the aid of at least one spring element, the mating contact unit is always drawn in the direction of the accommodating/discharge position, with the result that the contact mechanism is always located in the same position. The user is thus capable of coupling the telephone by an easy hand movement.

[0014] A braking element which acts at least in certain regions ensures that the telephone is moved carefully in damped manner from the operating position into the

accommodating/discharge position. The braking element brakes the sliding movement and/or the rotary movement of the mating contact unit.

[0015] The telephone is arrested in the operating position in the head region of the holder. A restraining element, which grips over the head region of the telephone, prevents the telephone from being pushed out of the operating position by the mating contact unit and/or the longitudinal slide. Also arranged in the accommodating region of the holder are level-compensating elements which push against the rear side of the radio telephone. By virtue of the interaction of the level-compensating elements and of the restraining element, the telephone can be accommodated in the head region of the holder in a play-free manner irrespective of the housing thickness.

[0016] Furthermore, when the telephone is moved into the operating position, an ejector that acts on the rear side and/or the head side of the telephone is prestressed. The ejector causes the telephone, when released by the restraining element, to be raised from the accommodating region of the holder by way of the head region. The telephone is thus prevented in an effective manner from being jammed in the mount by the spring force acting on the longitudinal slides and/or the contact-making unit.

[0017] Finally, it is advantageous for the contact mechanism to be mounted in a floating manner, for example, in a plane located perpendicularly to the contact-making direction. This ensures that a telephone positioned with the contact unit in a slightly skewed manner does not damage the mating contact unit.

Brief Description of the Drawings

[0018] Further details of the invention are described in the drawing with reference to schematically illustrated exemplary embodiments.

[0019] Figure 1 is a side view of a telephone.

[0020] Figure 2 is a plan view of the holder.

[0021] Figure 3 is a cross section through the holder along section line III-III illustrated in Figure 2.

[0022] Figure 4 is a longitudinal section through the holder along section line IV-IV illustrated in Figure 2.

[0023] Figure 5 is a side view of an alternative mating contact unit with two contact units of two different telephones.

[0024] Figure 6 is a section through the alternative mating contact unit, illustrated in Figure 5, along section line VI-VI and two contact units of two different telephones.

Detailed Description of the Invention

[0025] Figure 1 shows a telephone 1 with a housing 2. The housing 2 of the telephone 1 has a front side 3, a rear side 4, side surfaces 5, 6, a foot side 7 and a head side 8. The telephone 1 also has a foot region 9, a central region 10 and a head region 11. The foot region 9 is terminated by a contact unit 12. An aerial element or antenna 13 and a display 14 are arranged in the head region 11. The foot region and the central region 9, 10 have a keypad 15 on the front side 3. The telephone 1 has a thickness D1 in the foot region 9, a thickness D2 in the head region 11, and a longitudinal dimension L.

[0026] Figure 2 illustrates a holder 20. The latter has a mount 21 which extends beneath a cover 22 into a compartment 23. The mount 21 has a contour 24 (partially illustrated by dashed lines) which corresponds essentially to the outline of a telephone. A region 25 is to be assigned to an antenna of a telephone. The holder 20 is subdivided roughly into a head region 26, a central region 27 and a foot region 28. A mating contact unit 29 is arranged in the central region 27, in which the mount 21 merges into the compartment 23. The mating contact unit is made up of contact mechanism 30 and a roller-like basic body 31. The mating contact unit 29 is mounted such that it can be pivoted about an axis of rotation 32. Furthermore, the mating contact unit 29 can be displaced in an arrow direction x, along guides 33 (see Figure 4), into the compartment 23. Arranged in the head region 26 of the holder 20 is a restraining element 34 which extends over the mount 21 by way of a section 35 (see also Figure 4). In the transition from the head region 26 into the central region 27, level-compensating elements 36 are arranged in the mount 21.

[0027] Figure 3 shows a guide 37 for an ejector 38 (illustrated in Figure 4) beneath the restraining element 34.

[0028] As shown in Fig. 4, arranged beneath the mount 21 is a channel 39 in which there is a spring 40, certain sections of which are illustrated symbolically. In the central region 27 of the holder 20, the channel 39 opens into the mount 21. The spring 40 is connected to the basic body 31 of the mating contact unit 29 via a flexible element 41. The mating contact unit 29 is rotated in an arrow direction b by the restoring force of the spring 40, acting in arrow direction a. The rotation of the mating contact unit 29 is limited by a cam 42 integrally formed on the basic body 31 and striking against a wall 43 bounding the mount 21. The angle α through which the contact mechanism 30 and/or the mating contact unit 29 can be rotated in relation to a main plane E of

the holder 20 is fixed at approximately 75°. The mating contact unit 29 can be rotated about the axis of rotation 32 on a pin 44. The pin 44 can be displaced from a first position 45 into a second position 46 in arrow direction x along the guides 33.

[0029] In Figure 4, the mating contact unit 29 is located in an accommodating and/or discharge position 47 for the telephone 1. In this accommodating position 47, the telephone 1 is plugged on the mating contact unit 29 in arrow direction c. In this case, the telephone 1 is guided, and pushed onto, the contact mechanism 30 by way of the contact unit 12. During the pushing operation, the telephone 1 acts on the mating contact unit 29 with a force F. The force F introduced is transmitted from the mating contact unit 29 to the holder 20 via the pin 44. The holder 20 is supported, in turn, on a bracket (not illustrated). Since the force F acts perpendicularly on the axis of rotation 32, no torque to causes the mating contact unit 29 to rotate about the axis of rotation 32 is produced. The mating contact unit 29 is prevented from sliding away in the guides 33 by a brake 48 is designed such that a rotary movement of the mating contact unit 29 must first take place. The brake 48 has a gearwheel 49 rotated about a pin 50. The rotatability of the gearwheel 49 is made slightly more difficult. Arranged on the cam 42 of the mating contact unit 29 is a toothing formation (not illustrated) on which the gearwheel 49 rolls during rotation of the mating contact unit 29.

[0030] From the accommodating position 47, in which the telephone 1 is plugged on the mating contact unit 29, the mating contact unit 29, together with the telephone 1, is pivoted in arrow direction d. This rotary movement is followed by a rotary/sliding movement at the latest when the telephone 1 butts against the section 35 of the restraining element 34 by way of its rear side 4. It is also possible for this combined rotary/sliding movement to commence, at the earliest, when the rotary movement produces, between the front side 3 of the telephone 1 and an

edge 51 of the cover 22, a spacing which allows displacement of the telephone 1 in arrow direction x. The extent to which a sliding movement in the direction of the arrow x is necessary depends on the longitudinal dimension L of the telephone 1. The holder 20 illustrated in Figure 4 is suitable for accommodating a telephone 1 which has at least one length dimension L corresponding to a spacing h between the basic body 31 and a wall 52 of the mount 21. By virtue of the mating contact unit 29 being displaced in the guides 33 in the arrow direction x, it is possible to accommodate a telephone 1 with a length dimension L which is somewhat smaller than the sum of the spacing h and i. In this case, spacing i is the extent of the maximum displacement path of the mating contact unit 29 in arrow direction x. The rotary/sliding movement of the telephone 1 and the mating contact unit 29 is continued until the telephone 1 comes to rest approximately parallel to the main plane E. This is followed by a rearward sliding movement of the telephone 1 and of the mating contact unit 29 in arrow direction a. This rearward sliding movement is executed by the spring 40, which has been stressed by rotary/sliding operation. By virtue of this rearward sliding movement, the telephone 1 grips behind the restraining element 34 by way of its head region 11 and has reached an operating position. In this operating position, the telephone 1 is accommodated to the full extent by the mount 21 and is retained in a play-free manner between the restraining element 34 and the level-compensating element 36. The level-compensating element 36 comprises an elastic cap 52 which accommodates a spring 53. The level-compensating element 36 compensates for telephones 1 of different thicknesses D2. Furthermore, the rearward sliding movement prestresses a leafspring 54 to which the ejector 38 is connected.

[0031] A movement of the telephone 1 from said operating position into the discharge position 47 can be initiated by the restraining element 34, which is prestressed in arrow direction

x by the spring mechanism 55, being slid in the rearward direction. The ejector 38 and the prestressed spring 40 cause the telephone 1 and the mating contact unit 29 to be rotated in arrow direction b. As soon as the head region 11 of the telephone 1 is located above the restraining element 34, this rotation is surperimposed by a sliding movement in arrow direction a, as long as the mating contact unit 29 is not still located in position 45. During the final rotary movement of the telephone 1 and of the mating contact unit 29, the brake 48 is active and allows the discharge position 47 to be approached smoothly. In the discharge position 47, it is possible for the telephone 1 to be removed from the mating contact unit 29 or for the telephone 1 to be moved into the operating position again.

[0032] Figure 5 shows a side view of an alternative mating contact unit 29'. Contact units 12', 12'' of telephones 1', 1'' are illustrated schematically above the mating contact unit 29'. The mating contact unit 29' has a basic body 31', which can be rotated about an axis of rotation 32'. The basic body 31' has a flattened portion 56 on which a contact mechanism 30' is arranged. The contact mechanism 30' is connected, via a ribbon cable 57 running in part in the basic body 31', to components (not illustrated) such as, for example, a microphone, loudspeaker and aerial. A variant which is not illustrated also provides for connection via a coaxial cable. The flattened portion 56 has a width C which makes it possible for telephones 1', 1'' of different widths C', C'' to be positioned on the contact mechanism 30', the contact units 12', 12'' of the telephones 1', 1'' gripping around, and accommodating, the contact mechanism 30' of the mating contact unit 29'.

[0033] The section illustrated in Figure 6 clearly shows that the mating contact unit 29' has a cam 42', which serves for limiting the rotation of the mating contact unit 29' (see description in

relation to Figure 4). The flattened portion 56 of the mating contact to be made with telephones 1', 1'' with foot regions 9', 9'' of different thicknesses D1', D1''.

[0034] The invention, rather than being restricted to exemplary embodiments illustrated or described, also covers developments of the invention within the scope of the claims. The invention also makes provision, in particular, for connections between the contact unit of the telephone and the mating contact unit which are purely mechanical, provision being made here for form-fitting and/or force fitting connections in particular. A force-fitting connection may be realized, for example, by magnets.

VERSION WITH MARKINGS SHOWING CHANGES MADE

"Apparatus for holding and making contact with a radio telephone"

Background of the Invention

The invention relates to an apparatus for securing and connecting a cellular or radio mobile telephone [according to the preamble of Patent Claim 1].

Such apparatuses are used in order for a [radio] telephone to be retained securely and to be connected [electrically]to components installed in the vehicle, for examples hands-free talking facilities, displays and vehicle aerials.

Such an accommodating apparatus is known, for example, from German patent document DE 197 55 621 A1. In this retaining apparatus, a mobile telephone is plugged on plug contacts which, on a plate, are articulated on a slide via a hinge. In order to accommodate the mobile telephone in a compartment, the mobile telephone is pivoted onto the slide, clamped in this position by a wall element and then moved into the compartment in the longitudinal direction of the slide. For removal of the mobile telephone, the plate is pivoted with the mobile telephone and the mobile telephone is [drawn off]removed from the plug contacts.

One[The] disadvantage with the prior art is that[,] when the mobile telephone is plugged on and/or removed[drawn off], the plug contacts of the retaining apparatus can only exert a limited counterpressure since forces can only be dissipated to the compartment via the plate, hinge and slide. Furthermore, it is not possible for [mobiles]mobile telephones of different sizes to be

retained securely by the retaining apparatus, since the retaining apparatus, which retains the mobile telephone in a force-fitting manner, is coordinated with a predetermined size of mobile telephone.

Brief Summary of the Invention

[The] An object of the invention is to provide an apparatus which allows the insertion of [radio] telephones of a wide range of different dimensions, does not yield as the [radio] telephone is placed in position and removed, and, for the purposes of placing in position and removal, moves the [radio] telephone into an ergonomically optimal position for the user.

This and other objects are [object is] achieved [according to] with the present invention [, in conjunction with the preamble of Patent Claim 1, by the characterizing features of Patent Claim 1].

The apparatus according to the invention comprises a holder which can be adapted to the longitudinal dimension of the housing of the [radio] telephone. This adaptation takes place by a longitudinal displacement of the mating contact unit to which the [radio] telephone is connected. Alternatively, or in addition, length adaptation of the apparatus is provided by a longitudinal slide mounted on the holder [independently]independent of the mating contact unit. [These possibilities for adaptation realize a holder for radio telephones which makes]The adaptation options make it possible to accommodate [radio] telephones of different length dimensions without the holder having to be modified[in any way by]with the exchange of components or by additional components. [As far as the use of the holder in motor vehicles is concerned, this

means that the]The holder [provided]can be used by any user who has a [radio] telephone [which has]with a particular [certain] contact unit. It is unimportant [here]whether the various [radio] telephones have the same dimensions, in particular longitudinal dimensions.

The insertion of [radio] telephones with[of] different housing widths and/or housing thicknesses is ensured in that the mating contact unit, in the region of the contact means, has elevations only in a region which is located outside the conventional [radio] telephone dimensions. This forms a holder with an accommodating table or accommodating region which is fully independent of the housing dimensions. All that is [thus]required is for the [radio] telephone [which is to be inserted]to have an appropriate contact unit. The use of a [subsequently purchased]thick storage battery for[which renders] the [radio] telephone [thicker on the rear side thus does not necessitate any adaptation of the holder]can also be accommodated.

An ergonomic accommodating position/discharge position [with the radio telephone] is achieved by pivoting[in that, in this position,] the mating contact unit [has been pivoting through]45° to 135° in relation to the main plane of the holder. It is thus possible for the [radio] telephone to be coupled to the holder by a straightforward positioning movement in which the user, with the hand position remaining the same, merely has to lower his/her forearm.

Moving the [radio] telephone from the accommodating position/discharge position into an operating position also takes place with a flowing hand movement. In this case, the [radio] telephone is tilted in the direction of the holder and moved into the holder by a tilting/sliding movement. The rearward sliding movement which is necessary at the end, [by means of] in

which the [radio] telephone is moved beneath a restraining element by way of a head end, does not have to be executed by the user. This movement is executed by a spring which is prestressed by the rotary and sliding movement.

The force applied to the mating contact unit and/or to the contact [means]mechanism when the [radio] telephone is plugged on is introduced optimally into the holder since the contact mechanism [means], which [are]is configured, in particular, as connectors, [are] is aligned perpendicularly to the axis of rotation of the mating contact unit.

Pressure on the contact mechanism [means] thus does not result in any torque about the axis of rotation, and the compressive force is absorbed by the holder without any yielding movement [being possible].

With the aid of at least one spring element, the mating contact unit is always drawn in the direction of the accommodating/discharge position, with the result that the contact mechanism [means] is always located in the same position. The user is thus capable of coupling the [radio] telephone by [a routine] an easy hand movement.

A braking element which acts at least in certain regions ensures that the [radio] telephone is moved carefully in damped manner from the operating position into the accommodating/discharge position. [Said] The braking element brakes the sliding movement and/or the rotary movement of the mating contact unit.

The [radio] telephone is arrested in the operating position in the head region of the holder. A restraining element, which grips over the head region of the [radio] telephone, prevents the [radio] telephone from being pushed out of the operating position by the mating contact unit and/or the longitudinal slide. Also arranged in the accommodating region of the holder are level-compensating elements which push against the rear side of the radio telephone. By virtue of the interaction of the level-compensating elements and of the restraining element, the [radio] telephone [we [sic]] can be accommodated in the head region of the holder in a play-free manner irrespective of the housing thickness.

Furthermore, when the [radio] telephone is moved into the operating position, an ejector[, which] that acts on the rear side and/or the head side of the [radio] telephone is prestressed. [This]The ejector causes the [radio] telephone, when released by the restraining element, to be raised from the accommodating region of the holder by way of the head region. The [radio] telephone is thus prevented in an effective manner from being jammed in the mount by the spring force acting on the longitudinal slides and/or the contact-making unit.

Finally, it is advantageous for the contact [means] mechanism to be mounted in a floating manner, for example, in a plane located perpendicularly to the contact-making direction. This [measure] ensures that a [radio] telephone positioned with the contact unit in a slightly skewed manner does not damage the mating contact unit.

Brief Description of the Drawings

Further details of the invention are described in the drawing with reference to schematically illustrated exemplary embodiments.

[In the drawings:]

Figure 1 [shows] is a side view of a [radio] telephone[;].

Figure 2 [shows] is a plan view of the holder[;].

Figure 3 [shows] is a cross section through the holder along section line III-III illustrated in Figure 2[;].

Figure 4 [shows] is a longitudinal section through the holder along section line IV-IV illustrated in Figure 2[;].

Figure 5 [shows] is a side view of an alternative mating contact unit with two contact units of two different [radio] telephones[;].

Figure 6 [shows] is a section through the alternative mating contact unit, illustrated in Figure 5, along section line VI-VI and two contact units of two different [radio] telephones.

Detailed Description of the Invention

Figure 1 shows a [radio] telephone 1 with [the] a housing 2. The housing 2 of the [radio] telephone 1 has a front side 3, a rear side 4, side surfaces 5, 6, a foot side 7 and a head side 8. The [radio] telephone 1 also has a foot region 9, a central region 10 and a head region 11. The foot region 9 is terminated by a contact unit 12. An aerial element or antenna 13 and a display 14 are arranged in the head region 11. The foot region and the central region 9, 10 have a keypad 15 on the front side 3. The [radio] telephone 1 has a thickness D1 in the foot region 9, a thickness D2 in the head region 11, and a longitudinal dimension L.

Figure 2 illustrates a holder 20. The latter has a mount 21 which extends beneath a cover 22 into a compartment 23. The mount 21 has a contour 24 (partially illustrated by dashed lines) which corresponds essentially to the outline of a [radio] telephone. A region 25 [here]is to be assigned to an antenna [aerial] of a [radio] telephone. The holder 20 is subdivided roughly into a head region 26, a central region 27 and a foot region 28. A mating contact unit 29 is arranged in the central region 27, in which the mount 21 merges into the compartment 23. [Said] The mating contact unit is made up [essentially] of contact [means] mechanism 30 and a roller-like basic body 31. The mating contact unit 29 is mounted such that it can be pivoted about an axis of rotation 32. Furthermore, the mating contact unit 29 can be displaced in an arrow direction x, along guides 33 (see Figure 4), into the compartment 23. Arranged in the head region 26 of the holder 20 is a restraining element 34 which [covers] extends over the mount 21 by way of a section 35 (see also Figure 4). In the transition from the head region 26 into the central region 27, level-compensating elements 36 are arranged in the mount 21.

Figure 3 shows a [section through the holder 20, illustrated in Figure 2, along section line III-III. A] guide 37 for an ejector 38 (illustrated in Figure 4) [is illustrated] beneath the restraining element 34.

[Figure 4 shows a longitudinal section through the holder 20, illustrated in Figure 2, along section line IV-IV. Arranged]As shown in Fig. 4, arranged beneath the mount 21 is a channel 39 in which there is a spring 40, certain sections of which are illustrated symbolically. In the central region 27 of the holder 20, the channel 39 opens [out] into the mount 21. The spring 40 is

connected to the basic body 31 of the mating contact unit 29 via a flexible element 41. The mating contact unit 29 is rotated in an arrow direction b by the restoring force of the spring 40, [said force]acting in arrow direction a. The rotation of the mating contact unit 29 is limited by a cam 42 [which is]integrally formed on the basic body 31 and [strikes] striking against a wall 43 bounding the mount 21. The angle α through which the contact mechanism [means] 30 and/or the mating contact unit 29 can be rotated in relation to a main plane E of the holder 20 is [thus] fixed at approximately 75°. The mating contact unit 29 can be rotated about the axis of rotation 32 on a pin 44. The pin 44 can be displaced from a first position 45 into a second position 46 in arrow direction x[,] along the guides 33.

In Figure 4, the mating contact unit 29 is located in an accommodating and/or discharge position 47 for the [radio] telephone 1. In this accommodating position 47, the [radio] telephone 1 is plugged on the mating contact unit 29 in arrow direction c. In this case, the [radio] telephone 1 is guided, and pushed onto, the contact [means] mechanism 30 by way of the contact unit 12. During the pushing[-on] operation, the [radio] telephone 1 acts on the mating contact unit 29 [by]with a force F. The force F introduced is transmitted from [said]the mating contact unit 29 to the holder 20 via the pin 44. The holder 20 is supported, in turn, on a bracket (not illustrated). Since the force F acts perpendicularly on the axis of rotation 32, no torque [which]to causes the mating contact unit 29 to rotate about the axis of rotation 32 is produced. The mating contact unit 29 is prevented from sliding away in the guides 33[in that] by a brake 48 is designed such that [first of all] a rotary movement of the mating contact unit 29 [has to]must first take place. The brake 48 has a gearwheel 49[, which can be] rotated about a pin 50. The rotatability of the gearwheel 49 is made slightly more difficult. Arranged on the cam 42 of the mating contact unit

29 is a toothing formation (not illustrated) on which the gearwheel 49 rolls during rotation of the mating contact unit 29.

From the accommodating position 47, in which the [radio] telephone 1 is plugged on the mating contact unit 29, the mating contact unit 29, together with the [radio] telephone 1, is pivoted in arrow direction d. This rotary movement is followed by a rotary/sliding movement at the latest when the [radio] telephone 1 butts against the section 35 of the restraining element 34 by way of its rear side 4. It is also possible for this combined rotary/sliding movement to commence, at the earliest, when the rotary movement produces, between the front side 3 of the [radio] telephone 1 and an edge 51 of the cover 22, a spacing which allows displacement of the [ratio]telephone 1 in arrow direction x. The extent to which a sliding movement in the direction of the arrow x is necessary depends on the longitudinal dimension L of the [radio] telephone 1. The holder 20 illustrated in Figure 4 is suitable for accommodating a [radio] telephone 1 which has at least one length dimension L corresponding to a spacing h between the basic body 31 and a wall 52 of the mount 21. By virtue of the mating contact unit 29 being displaced in the guides 33 in the arrow direction x, it is possible to accommodate a [radio] telephone 1 with a length dimension L which is somewhat smaller than the sum of the spacing h and i. In this case, spacing i is the extent of the maximum displacement path of the mating contact unit 29 in arrow direction x. The rotary/sliding movement of the [radio] telephone 1 and the mating contact unit 29 is continued until the [radio] telephone 1 comes to rest approximately parallel to the main plane E. This is followed by a rearward sliding movement of the [radio] telephone 1 and of the mating contact unit 29 in arrow direction a. This rearward sliding movement is executed by the spring 40, which has been stressed by rotary/sliding operation. By virtue of this rearward sliding

movement, the [radio] telephone 1 grips behind the restraining element 34 by way of its head region 11 and has reached an operating position. In this operating position, the [radio] telephone 1 is accommodated to the full extent by the mount 21 and is retained in a play-free manner between the restraining element 34 and the level-compensating element 36. The level-compensating element 36 comprises an elastic cap 52 which accommodates a spring 53. The level-compensating element 36 compensates for [radio] telephones 1 of different thicknesses D2. Furthermore, the rearward sliding movement prestresses a leafspring 54 to which the ejector 38 is connected.

A movement of the [radio] telephone 1 from said operating position into the discharge position 47 can be initiated by the restraining element 34, which is prestressed in arrow direction x by the spring mechanism 55, being slid in the rearward direction. The ejector 38 and the [prestress] prestressed spring 40 cause the [radio] telephone 1 and the mating contact unit 29 to be rotated in arrow direction b. As soon as the head region 11 of the [radio] telephone 1 is located above the restraining element 34, this rotation is superimposed by a sliding movement in arrow direction a, as long as the mating contact unit 29 is not still located in position 45. During the final rotary movement of the [radio] telephone 1 and of the mating contact unit 29, the brake 48 is active and allows the discharge position 47 to be approached smoothly. In the discharge position 47, it is possible for the [radio] telephone 1 to be removed from the mating contact unit 29 or for the [radio] telephone 1 to be moved into the operating position again.

Figure 5 shows a side view of an alternative mating contact unit 29'. Contact units 12'[.], 12'' of [radio] telephones 1', 1'' are illustrated schematically above the mating contact unit 29'. The

mating contact unit 29' has a basic body 31', which can be rotated about an axis of rotation 32'. The basic body 31' has a flattened portion 56 on which a contact mechanism[means] 30' [are]is arranged. The contact [means]mechanism 30' [are]is connected, via a ribbon cable 57 running in part in the basic body 31', to components (not illustrated) such as, for example, a microphone, loudspeaker and aerial. A variant which is not illustrated also provides for connection via a coaxial cable. The flattened portion 56 has a width C which makes it possible for[radio] telephones 1', 1'' of different widths C', C'' to be positioned on the contact mechanism[means] 30', the contact units 12', 12'' of the[radio] telephones 1', 1'' gripping around, and accommodating, the contact [means]mechanism 30' of the mating contact unit 29'.

[Figure 6 shows a section through the mating contact unit 29' along the section line VI-VI illustrated in Figure 5.]The section illustrated in Figure 6 clearly shows that the mating contact unit 29' has a cam 42', which serves for limiting the rotation of the mating contact unit 29' (see description in relation to Figure 4). The flattened portion 56 of the mating contact to be made with [radio] telephones 1', 1'' with foot regions 9', 9'' of different thicknesses D1', D1''.

The invention, rather than being restricted to exemplary embodiments illustrated or described, also covers developments of the invention within the scope of the claims. The invention also makes provision, in particular, for connections between the contact unit of the [radio] telephone and the mating contact unit which are purely mechanical, provision being made here for form-fitting and/or force fitting connections in particular. A force-fitting connection may be realized, for example, by magnets.